PROJECT DESCRIPTION

GENERAL

THIS PROJECT INVOLVES THE SYSTEMIZATION OF TRAFFIC SIGNALS ON MD 103 FROM US 29 RAMP "F" TO LONG GATE PARKWAY IN HOWARD COUNTY. THIS MODIFICATION AT MD 103 AND US 29 RAMP "F" INVOLVES INSTALLATION OF VIDEO DETECTION FOR PRESENCE ON THE EAST-, WEST-, AND SOUTHBOUND APPROACHES. SETBACK
ON THE EAST-, WEST-, AND SOUTHBOUND APPROACHES WILL BE MAINTAINED BY SMALL AREA DETECTORS. ALL EXISTING TRAFFIC SIGNAL HEADS WILL BE UPGRADED TO BLACK FACED LED. MD 103 IS ASSUMED TO RUN IN AN EAST-WEST DIRECTION.

INTERSECTION OPERATION

THE INTERSECTION OPERATES IN A NEMA THREE-PHASE, FULL-TRAFFIC-ACTUATED MODE WITH AN EXCLUSIVE MOVEMENTS FOR ALL APPROACHES.

CONTROLLER REQUIREMENTS

THE EXISTING BASE MOUNTED CONTROLLER WILL REMAIN. THE SHA SIGNAL SHOP WILL INSTALL THE VIDEO DETECTION EQUIPMENT WITHIN THE CABINET.

THE CONTRACTOR SHALL NOTIFY MR. ROBERT SNYDER OF THE SHA AT (410) 787-7635 TO ARRANGE THE PHONE DROP LINE INSTALLATION. THE CONTRACTOR IS TO PROVIDE MR. SNYDER WITH THE NEAREST STREET ADDRESS, ZIP CODE, AND PHONE NUMBER.

THE CONTACT PERSONS FOR DISTRICT #7 ARE AS FOLLOWS:

Mr. John Concannon Assistant District Engineer - Traffic Phone: 301-624-8140

Ms. Andrea Abend Assistant District Engineer - Utility Phone: 301-624-8115

Mr. Ray Johnson Assistant District Engineer - Maintenance Phone: 301-624-8108

Mr. Edward Rodenhizer Chief, SHA Traffic Signal Shop Phone: 410-787-7650

Mr. Richard L. Daff Sr. Chief, Traffic Operations Division Phone: 410-787-7630

The Power Company Representative is:
Baltimore Gas & Electric Company 7317 Parkway Drive South Hanover, MD 21076 Phone: 410-859-9062

EQUIPMENT LIST 'A'

EQUIPMENT TO BE FURNISHED BY THE SHA.

ITEM NO **QUANTITY DESCRIPTION**

ΙEΑ 9086

[UPDATED] VIDEO DETECTION INTERFACE EQUIPMENT: 1-4 CAMERAS

EQUIPMENT LIST 'C'

EQUIPMENT TO BE REMOVED AND RETURNED TO SHA.

DESCRIPTION ITEM NO

ALL REMOVED EQUIPMENT SHALL BECOME THE PROPERTY OF THE CONTRACTOR.

WIRING DIAGRAM

ELW ELW -7-CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG) SPLICE EXISTING LOOP DETECTOR WITH NEW 2 CONDUCTOR (ALUMINUM SHIELDED) P,Q,R ----5-CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG) N.0 -G -2-CONDUCTOR ELECTRICAL CABLE (NO. 12 AWG), TC A,G,K,M — J-CONTROL CABLE, 100 FOOT, VIDEO DETECTION CONTROL CABLE, 200 FOOT, VIDEO DETECTION M -NO. 6 AWG STRANDED BARE COPPER GROUND WIRE P -2 CONDUCTOR ELECTRICAL CABLE (ALUMINUM SHIELDED) PPD PROPOSED UNDERGROUND TELEPHONE DROP TO BE INSTALLED BY OTHERS ELW -EXISTING LOOP DETECTOR WIRE = = = > SEE 1/C PLAN A,G,K,M,N,O,P,Q,R-EPS - EXISTING POWER SOURCE EXISTING GROUND ROD ____J,K,L,N,O,P,Q,R A,B,C,G,H-- A,B,C,G,H,J,K,L,N,O,P,Q,R

EQUIPMENT LIST 'B'

EQUIPMENT TO BE FURNISHED AND INSTALLED BY THE CONTRACTOR.

ITEM NO.	QUANTITY	DESCRIPTION
1002	2 EA	MAINTENANCE OF TRAFFIC
5003	15 LF	REMOVAL OF EXISTING PERMANENT PAVEMENT LINE MARKINGS - ANY WIDTH
5004	2 EA	REMOVAL OF EXISTING PERMANENT PAVEMENT MARKING LETTERS, SYMBOLS, ARROWS AND NUMBERS
5006	IOO LF	24 INCH HEAT APPLIED WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKINGS
5007	4 EA	HEAT APPLIED WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKING LETTERS
5008	4 EA	HEAT APPLIED WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKING ARROWS
8003	13 EA	12 INCH RED OR GREEN LED SIGNAL HEAD SECTION
8004	6 EA	12 INCH YELLOW LED SIGNAL HEAD SECTION
8011	3 EA	CONDUIT BEND IN EXISTING FOUNDATION
8012	I EA	CONTROL CABLE, 100 FOOT, VIDEO DETECTION
8013	2 EA	CONTROL CABLE, 200 FOOT, VIDEO DETECTION
8041	180 LF	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
8049	40 LF	4 INCH SCHEDULE 80 RIGID PVC CONDUIT - BORED
8050	410 LF	2 INCH SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED
8051	30 LF	3 INCH SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED
8055	140 LF	4 INCH SCHEDULE 80 RIGID PVC CONDUIT - SLOTTED
8069	3 EA	VIDEO DETECTION CAMERA
8094	II50 LF	ELECTRICAL CABLE - 2 CONDUCTOR (ALUMINUM SHIELDED)
8097	75 LF	ELECTRICAL CABLE - 5 CONDUCTOR (NO.14 AWG)
8098	400 LF	ELECTRICAL CABLE - 7 CONDUCTOR (NO.14 AWG)
8099	280 LF	ELECTRICAL CABLE - 2 CONDUCTOR (NO.12 AWG)

PHASE CHART

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PHASE I CHANGE	R	R	Y	Y	R	R				
PHASE 2	G	G	R	R	R	R				
PHASE 2 CHANGE	Y	Y	R	R	R	R				
PHASE 4	R	R	R	Ŕ	G	G	 			
PHASE 4 CHANGE	R	R	R	R	Y	. Y	<u></u>			
FLASHING OPERATION	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	+ +			

TOD NO.: AT720-11 SHA No.:HO365A52/B52

STATE OF MARYLAND DEPARTMENT OF TRANSPORTATION STATE HIGHWAY ADMINISTRATION OFFICE OF TRAFFIC & SAFETY

TRAFFIC ENGINEERING DESIGN DIVISION MD 103 (MONTGOMERY ROAD) AT US 29 RAMP "F"

GENERAL INFORMATION

SCALE NONE DATE 08/2006 CONTRACT NO. AT7205185 LOGMILE _____13010307.37 T.I.M.S. NO. <u>G823</u> CHECKED BY _____BAB_

SHEET NO. 2 OF 8

STV Incorporated

7125 Ambassador Road Baltimore, MD 21244-2722 (410) 944-9112

rchitects/planners/construction managers

ELW

POLE NUMBER UNKNOWN

PLOTTED: WEDNESDAY, JULY 19, 2006 AT 01:48 PM FILE: I:\PROJECTS\0312513\0312513_0001\DRAWINGS\TRA\RAMP F\PGI-P000_MD-103.DGN

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